- A method of treating pain comprising administering to a subject a pharmaceutical composition comprising an effective amount of a compound of Formula I, a tautomer, or a WHAT IS CLAIMED:
- pharmaceutically-acceptable salt, -hydrate, or -solvate thereof: 5

Formula I

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wherein R_a and R_b are each independently selected from the group consisting of: hydrogen, saturated or unsaturated C_{1-8} alkyl, saturated or unsaturated C_{3-7} cycloalkyl, aralkyl, and

 R_a and R_b are optionally taken together to form a ring of 3 to 7 members, with or without saturated or unsaturated C2-6 heterocycle; or

- substitution, and with or without heteroatoms in place of ring carbon atoms; 15
 - $R_{\rm c}$ and $R_{\rm c}$ are independently selected from the group consisting of: H, OR, saturated or unsaturated C_{1-8} alkyl, saturated or unsaturated C_{3-7} cycloalkyl, aralkyl, aryl, saturated or

unsaturated heterocycle, and $-C(G)\Sigma$; wherein G = O, S or NR_d ; and

 $\Sigma = L, R_d, OR_d, or \ N(R_d)_2; \ except \ that \ -NR_cR_c' \ cannot \ be \ -N(OR)_2; \ and \ OR_d \ cannot \ be \ -OH;$

each R_d is independently selected from the group consisting of: H, saturated or unsaturated C_{1-8} alkyl, saturated or unsaturated C_{3-7} cycloalkyl, aralkyl, aryl, heteroaryl, and saturated or 20 unsaturated C2-6 heterocycle; or

two R_d groups are optionally taken together to form a ring of 4 to 7 members, with or without unsaturation and with or without heteroatoms in place of ring-carbon units; or one R_d and one of R_c or R_c ' are optionally taken together to form a ring of 4 to 7 members, with or without unsaturation and with or without heteroatoms in place of ring-carbon units;

R is selected from the group consisting of: H, saturated or unsaturated C₁₋₈ alkyl, saturated or unsaturated C₃₋₇ cycloalkyl, aryl, aralkyl, heteroaryl, and saturated or unsaturated C₂₋₆ heterocycle;

L is selected from the group consisting of: H, -CF₃, -CF₂CF₃, saturated or unsaturated C_{1-8} alkyl, saturated or unsaturated C_{3-7} cycloalkyl, aryl, aralkyl, heteroaryl, saturated or

unsaturated C₂₋₆ heterocycle, saturated or unsaturated C₁₋₆ alkoxy, aralkoxy, aryloxy, N,N-disubstituted-amino, N-substituted amino, and unsubstituted-amino; when L is N-substituted-amino, or N,N-disubstituted-amino, each substituent of said amino group of L is selected from the group consisting of: C₁₋₈ alkyl, C₃₋₇ cycloalkyl, aryl, aralkyl, heteroaryl, and saturated or unsaturated C₂₋₆ heterocycle;

when L is N,N-disubstituted-amino, the two substituents independently selected from the group above are optionally taken together to form a ring of 3 to 7 members, wherein said formed ring thereon bears the remaining features of said selected substituents before said ring formation;

 $R_e = O$ or absent;

or

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20 R_f = H, halogen, saturated or unsaturated C₁₋₈ alkyl, saturated or unsaturated C₃₋₇ cycloalkyl, aryl, aralkyl, heteroaryl, saturated or unsaturated C₂₋₆ heterocycle, -OH, saturated or unsaturated C₁₋₆ alkoxy, aryloxy, -SH, C₁₋₆ thioalkyl, thioaryl, -[(CO)OR], -[(CO)NRR], amino, -N-substituted amino, or N,N-disubstituted amino; wherein each said substituent on said N-substituted-amino-group, or N,N-disubstituted-amino-group of R_f is independently selected from the group consisting of: C₁₋₈ alkyl, C₃₋₇ cycloalkyl, aryl, aralkyl, heteroaryl, C₂₋₆ heterocycle, -[(CO)R] and -[(CO)-NRR]; wherein each R is independently as defined above;

when R_f is -[(CO)NRR], -[NH(CO)NRR], -[N(C_{1-8} alkyl)(CO)NRR], -[N(aryl)(CO)NRR], or [N(aralkyl)(CO)NRR], the R groups of a said -NRR unit in R_f are optionally taken together such that a ring of 3 to 7 members is formed, with or without heteroatoms in place of the ring-carbon units;

J = N or C, with the proviso that when J = N, then R_g is absent;

when J = C, R_g is selected from the group consisting of: -H, halogen, saturated or unsaturated C_{1-8} alkyl, saturated or unsaturated C_{3-7} cycloalkyl, aralkyl, aryl, -OH, saturated or unsaturated C_{1-6} alkoxy, aryloxy, -SH, C_{1-6} thioalkyl, thioaryl, -[(CO)OR], -[(CO)NRR], and -NRR; wherein each R is independently as defined above; or

when R_g is -[(CO)NRR] or -NRR, the R groups of said -NRR unit in R_g can be taken together such that a ring of 3 to 7 members is formed, with or without heteroatoms in place of the ring-carbon units;

A and B are each independently selected from the group consisting of: $-C_{1-3}$ alkylene-, $-CF_{2-}$, and -(CO)-; wherein each said $-C_{1-3}$ alkylene- unit of A and B independently is saturated or unsaturated, and each carbon of a $-C_{1-3}$ alkylene- unit of B independently is substituted with 0 to 2 fluorine groups, 0 to 1 methyl groups, 0 to 2 -[(CO)OR] groups, and 0 to 1 -(OR) groups; or

B is absent; or

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any one-carbon-unit within either or both of said C_{1-3} alkylene units of A and B is substituted with a heteroatom-containing-unit selected from the group: -O-,

- -S-, -NR-, -[NR(CO)]- or -N[(CO)L]-, where each R and L is independently as defined above; provided that (a) fewer than three said heteroatom-containing-unit for one-carbon-unit substitutions on the -A-B- chain are made, (b) no -S-S- or -O-O- bonds are formed in the X-A-B- chain by said substitution or substitutions of a heteroatom-containing-unit for a one-carbon-unit on the -A-B- chain, and (c) no said heteroatom substitution is made such that the said replacement heteroatom connects directly to the tetrahydrofuran ring shown in Formula I; X = -OR, -SR, -S(O)L, -S(O₂)L, -SO₃H, -S(O₂)NRR, -S(O₂)NR(CO)L, -NRR, -NR(CO)L, -N[(CO)L]₂, -NR(SO₂)L, -NR(SO₂)L, -NR(SO₂)NRR, or -NR(SO₂)NR(CO)L; wherein each R and L is independently as defined above;
- wherein the R groups of a -NRR unit in X are optionally taken together such that a ring of 3 to 7 members is formed, with or without heteroatoms in place of the ring-carbon units; with the proviso that no compound in Formula I contains: a halogen-group, hydroxy-group, sulfhydryl-group, or amino-group attached to an sp³-hybridized-carbon atom that is bonded directly to a heteroatom selected from the group consisting of O, S and N;
- the first exception to this proviso is: compounds in which the said sp³-hybridized-carbon atom is bonded directly to: 1) a sulfur atom which is part of a-[S(O)]-group, or a-[S(O₂)]-group, and also to: 2) one or more halogen groups;

the second exception to this proviso is the C-1' position of the furanose of compounds of Formula I wherein the sp³-hybridized carbon atom at the 1'-position is attached to: 1) the oxygen atom of the furanose ring and to: 2) the nitrogen atom of the adenine or 8-azaadenine moiety; or

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X is a group as provided in Formula II:

Formula II

$$\begin{array}{c|c} RO_2C \\ Y - - N \\ Z' - \left(Z\right)_n \end{array}$$

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wherein:

n = 1 to 4, inclusive;

Y, Z and Z' are independently selected from -CRR_f-, -NR-, -[N(CO)L]-, -O- and -S-; or the said -Y-Z'-unit, taken together, can be selected to be a -N=N- unit or a -CR=CR_f- unit; or any-(Z)₂-unit or subunit of -(Z)_n can be selected to be a -CR=CR_f- unit; and

with the provisos that the ring shown in Formula II contains no more than three heteroatoms, and that the shown pendant -CO₂R unit in Formula II is a substituent on the ring described in Formula II, and that the ring of Formula II contains no halogen-group, hydroxy-group, sulfhydryl-group, or amino-group attached to an sp³-hybridized-carbon atom that is bonded

directly to a heteroatom selected from the group consisting of O, S, and N.

2. The method according to Claim 1, wherein said compound is selected from the group

consisting of: 3-{6-[6-(3-Ethyl-1-phenyl-ureido)-purin-9-yl]-2,2-dimethyl-tetrahydrofuro[3,4-*d*][1,3]dioxol-4-ylmethoxy}-isoxazole-5-carboxylic acid; 3-(6-{6-[3-Ethyl-1-(5methyl-furan-2-ylmethyl)-ureido]-purin-9-yl}-2,2-dimethyl-tetrahydro-furo[3,4-*d*][1,3]dioxol-4-ylmethoxy)-isoxazole-5-carboxylic acid; 3-{2,2-Dimethyl-6-[6-(3-phenylureido)-purin-9-yl]-tetrahydro-furo[3,4-*d*][1,3]dioxol-4-ylmethoxy}-isoxazole-5-carboxylic

acid; 3-{2,2-Dimethyl-6-[6-(3-phenyl-1-propyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}-N-hydroxybenzamide; 6-{2,2-Dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4d[1,3]dioxol-4-ylmethoxy}-nicotinamide; 1-{9-[6-(3-Hydroxy-pyridin-2-yloxymethyl)-2,2-5 $dimethyl-tetrahydro-furo [3,4-d] [1,3] dioxol-4-yl]-9H-purin-6-yl\}-3-phenyl-urea; 3-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-1-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,2-d\},1)-(\{2,$ Dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxole-4-carbonyl}amino)-benzoic acid; 2-({2-Benzyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4d][1,3]dioxole-4-carbonyl}-amino)-3-hydroxy-propionic acid; N-{2-Benzyl-6-[6-(3-phenylureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxole-4-carbonyl}-methanesulfonamide; 1-10 [9-(2-Benzyl-6-ureidomethyl-tetrahydro-furo[3,4-d][1,3]dioxol-4-yl)-9H-purin-6-yl]-3phenyl-urea methylsulfonamide; 3-{2,2-Dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]tetrahydro-furo[3,4-d][1,3]dioxol-4-yl}-acrylic acid methyl ester; 3-{2,2-Dimethyl-6-[6-(3phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-4-yl}-propionic acid methyl ester; 3-{2,2-Dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-15 4-yl}-propionic acid; and 3-(3-{2,2-Dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydrofuro[3,4-d][1,3]dioxol-4-yl}-propionylamino)-benzoic acid.

3. A method of treating pain comprising administering to a subject a pharmaceutical composition comprising an effective amount of a compound of Formula III, a tautomer, or a pharmaceutically-acceptable salt, -hydrate, or -solvate thereof:

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Formula III

$$R_{c}$$
 R_{c}
 R_{c}

wherein R_a, R_b, R_c, R_c', Σ, R, L, R_d, R_e, R_f, J, R_g are as defined in Formula I of Claim 1; X₁ is selected from the group consisting of: N and C-M; and M is independently selected from the group consisting of: -H, halogen, CF₃, saturated or unsaturated C₁₋₈ alkyl, saturated or unsaturated C₃₋₇ cycloalkyl, aryl, aralkyl, heteroaryl, saturated or unsaturated C₂₋₆ heterocycle, -OH, C₁₋₆ alkoxy, aralkoxy, aryloxy, -SH, C₁₋₆
thioalkyl, thioaryl, -[(CO)OR], -[(CO)NRR], amino, -N-substituted amino, and N,N-disubstituted amino; wherein each said substituent on said amino of M is independently selected from the group consisting of: saturated or unsaturated C₁₋₈ alkyl, saturated or unsaturated C₃₋₇ cycloalkyl, aryl, aralkyl, heteroaryl, saturated or unsaturated C₂₋₆ heterocycle, -[(CO)R], -[(CO)O-(C₁₋₈ alkyl)], and -[(CO)-NRR]; and when M is -[(CO)NRR], [NH(CO)NRR], -[N(C₁₋₈ alkyl)(CO)NRR], -[N(aryl)(CO)NRR], or -[N(aralkyl)(CO)NRR], the R groups of any said -NRR unit in M are optionally taken together such that a ring of 3 to

7 members is formed, with or without heteroatoms in place of the ring-carbon units.

The method according to Claim 3, wherein said compound is selected from the group 4. consisting of: 5-Amino-2-{2,2-dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydrofuro[3,4-d][1,3]dioxol-4-ylmethoxy}-benzoic acid; 4-{2,2-Dimethyl-6-[6-(3-phenyl-ureido)purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}-isophthalic acid; 4-{2,2-5 Dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-4ylmethoxy}-benzoic acid; 6-{2,2-Dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydrofuro[3,4-d][1,3]dioxol-4-ylmethoxy}-nicotinic acid; 5-Chloro-6-{2,2-dimethyl-6-[6-(3phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}-nicotinic acid; 2- $\{2,2\text{-}Dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo [3,4-d][1,3] dioxol-4-dimensional and the statement of the statement of$ 10 ylmethoxy}-nicotinic acid; 6-Chloro-2-{2,2-dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}-5-fluoro-nicotinic acid; 6-Chloro-2-{2,2 $dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo [3,4-d][1,3] \\ dioxol-4-ylmethoxy \}-dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo [3,4-d][1,3] \\ dioxol-4-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo [3,4-d][1,4-d][1,4-d]$ 5-fluoro-nicotinic acid; 2-[6-[6-(3-Phenyl-ureido)-purin-9-yl]-2-(2-trifluoromethyl-phenyl)tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy]-nicotinic acid; 2-{2-Phenyl-6-[6-(3-phenyl-15 ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}-nicotinic acid; 2-{2-Biphenyl-3-yl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-4ylmethoxy}-nicotinic acid; 2-{2-Naphthalen-2-yl-6-[6-(3-phenyl-ureido)-purin-9-yl]tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}-nicotinic acid; 2-{2-Benzo[b]thiophen-3-yl- $6-[6-(3-phenyl-ureido)-purin-9-yl]-tetra hydro-furo [3,4-d][1,3] dioxol-4-ylmethoxy \}-nicotinic \\$ 20 acid; 2-{6-[6-(3-Hexyl-ureido)-purin-9-yl]-2-phenyl-tetrahydro-furo[3,4-d][1,3]dioxol-4ylmethoxy}-nicotinic acid; 2-{2,2-Dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydrofuro[3,4-d][1,3]dioxo-spiroindan-4-ylmethoxy}-nicotinic acid; 2-{6-[6-(3-Ethyl-ureido)purin-9-yl]-2-phenethyl-tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}-nicotinic acid; 2-{6-[6-(3-Ethyl-ureido)-purin-9-yl]-2-phenylethynyl-tetrahydro-furo[3,4-d][1,3]dioxol-4-25 ylmethoxy}-nicotinic acid; 2-{6-[6-(3-Ethyl-ureido)-purin-9-yl]-2-phenyl-tetrahydro $furo [3,4-d] [1,3] dioxol-4-ylmethoxy \}-nicotinic acid; 2-\{2-(2-Bromo-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3-ethyl-phenyl)-6-[6-(3$ ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}-nicotinic acid; 2-{6-[6-(3-Cyclopentyl-ureido)-purin-9-yl]-2-phenethyl-tetrahydro-furo [3,4-d][1,3] dioxol-4-diagram (3-Cyclopentyl-ureido)-purin-9-yl]-2-phenethyl-tetrahydro-furo [3,4-d][1,3] dioxol-4-diagram (3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3-Cyclopentyl-ureido)-purin-9-yll-1-(3ylmethoxy}-nicotinic acid; 2-{6-[6-(3-Cyclopentyl-ureido)-purin-9-yl]-2,2-(3,4-Dihydro-1H-30 naphthalen)-tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}-nicotinic acid; 2-{6-[6-(3-Cyclopentyl-ureido)-purin-9-yl]-2-p-tolyl-tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}nicotinic acid; 2-{2-Biphenyl-4-yl-6-[6-(3-hexyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4d][1,3]dioxol-4-ylmethoxy}-nicotinic acid; 2-{2-(4-Acetylamino-phenyl)-6-[6-(3-cyclopentyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}-nicotinic acid; and 2-{2-tert-Butyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-4-ylmethoxy}-nicotinic acid.

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5. A method of treating pain comprising administering to a subject a pharmaceutical composition comprising an effective amount of a compound of Formula IV, a tautomer, or a pharmaceutically-acceptable salt, -hydrate, or -solvate thereof:

Formula IV

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$$R_c$$
 R_c
 R_c

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wherein R_a , R_b , R_c , R_c ', Σ , R, L, R_d , R_e , R_f , J, R_g are as defined in Formula I of Claim I; M' is selected from the group consisting of: -H, halogen, CF₃, saturated or unsaturated C_{1-8} alkyl, saturated or unsaturated C_{3-7} cycloalkyl, aryl, aralkyl, heteroaryl, saturated or unsaturated C_{2-6} heterocycle, -OH, C_{1-6} alkoxy, aralkoxy, aryloxy, -SH, C_{1-6} thioalkyl, thioaryl, -[(CO)OR], -[(CO)NRR], amino, -N-substituted amino, and N,N-disubstituted amino; wherein each said substituent on said amino of M is independently selected from the group consisting of: saturated or unsaturated C_{1-8} alkyl, saturated or unsaturated C_{3-7} cycloalkyl, aryl, aralkyl, heteroaryl, saturated or unsaturated C_{2-6} heterocycle, -[(CO)R], -[(CO)O-(C_{1-8} alkyl)], and -[(CO)-NRR]; and when M' is -[(CO)NRR], -[NH(CO)NRR], -[N(C₁₋₈ alkyl)(CO)NRR], -[N(aryl)(CO)NRR], or -[N(aralkyl)(CO)NRR], the R groups of

any said -NRR unit in M' are optionally taken together such that a ring of 3 to 7 members is formed, with or without heteroatoms in place of the ring-carbon units; the M' and -CO₂R groups are independently attached to any carbon of the pyrrolidine ring; and M' is not a halogen, hydroxy, sulfhydryl, or amino group when M' is attached to a carbon that is bonded to the pyrollidine nitrogen atom at the alpha position.

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The method according to Claim 5, wherein said compound is selected from the group 6. consisting of: 1-{2-Phenyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4d][1,3]dioxole-4-carbonyl}-pyrrolidine-2-carboxylic acid; 1-{2-Phenyl-6-[6-(3-phenylureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxole-4-carbonyl}-pyrrolidine-2-carboxylic acid; 1-{2-Benzyl-6-[6-(3-ethyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxole-4carbonyl}-pyrrolidine-2-carboxylic acid; 1-(2-Phenyl-6-{6-[3-(2-phenyl-cyclopropyl)-ureido]purin-9-yl}-tetrahydro-furo[3,4-d][1,3]dioxole-4-carbonyl)-pyrrolidine-2-carboxylic acid; 1-{6-[6-(3-Benzyl-ureido)-purin-9-yl]-2-phenyl-tetrahydro-furo[3,4-d][1,3]dioxole-4carbonyl}-pyrrolidine-2-carboxylic acid; 1-{2-Benzo[b]thiophen-3-yl-6-[6-(3-hexyl-ureido)purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxole-4-carbonyl}-pyrrolidine-2-carboxylic acid; 1- ${2-Benzyl-6-[6-(3-hexyl-ureido)-purin-9-yl]-tetra hydro-furo[3,4-d][1,3] dioxole-4-carbonyl}-{2-Benzyl-6-[6-(3-hexyl-ureido)-purin-9-yl]-tetra hydro-furo[3,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][1,4-d][$ pyrrolidine-2-carboxylic acid; 1-{6-[6-(3-Ethyl-ureido)-purin-9-yl]-2-naphthalen-2-yltetrahydro-furo[3,4-d][1,3]dioxole-4-carbonyl}-pyrrolidine-2-carboxylic acid; 1-{6-[6-(3-Hexyl-ureido)-purin-9-yl]-2-phenyl-tetrahydro-furo[3,4-d][1,3]dioxole-4-carbonyl}pyrrolidine-2-carboxylic acid; 1-{6-[6-(3-Cyclopentyl-ureido)-purin-9-yl]-2-phenyltetrahydro-furo[3,4-d][1,3]dioxole-4-carbonyl}-pyrrolidine-2-carboxylic acid; and 1-(3-{2,2-Dimethyl-6-[6-(3-phenyl-ureido)-purin-9-yl]-tetrahydro-furo[3,4-d][1,3]dioxol-4-yl}propionyl)-pyrrolidine-2-carboxylic acid.

7. A method of treating pain comprising administering to a subject a pharmaceutical composition comprising an effective amount of a compound of Formulae V-XI, a tautomer, or a pharmaceutically-acceptable salt, -hydrate, or -solvate thereof, in which R, R_a, R_b, J and R_g, are defined as for Formula I in Claim 1, and n is 1-4:

Formula V

Formula VI

Formula VII

Formula VIII

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Formula IX

Formula X

$$HO_2C$$
 R
 HO_2C
 HO_2C
 HO_2C
 HO_2C
 HO_2C
 HO_2C
 HO_2C
 HO_2C
 HO_2C

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Formula XI

- 8. The method according to any one of Claims 1-7, wherein said pain is traumatic pain, neuropathic pain, organ pain, or pain associated with diseases.
- 9. The method according to Claim 8, wherein said traumatic pain is pain resulting from injury, burn, post-surgical pain or inflammatory pain.
 - 10. The method according to Claim 8, wherein said organ pain is ocular, corneal, bone, heart, skin, visceral, joint, dental or muscle pain.
- 10 11. The method according to Claim 8, wherein said diseases are cancer, AIDS, arthritis, herpes, sickle cell anemia or migraine.
 - 12. The method according to any one of Claims 1-7, wherein said pharmaceutical composition is administered topically to said subject.
 - 13. The method according to any one of Claims 1-7, wherein said pharmaceutical composition is administered via injection to said subject.

- 14. The method according to any one of Claims 1-7, wherein said pharmaceutical composition is administered orally to said subject.
 - 15. The method according to any one of Claims 1-7, wherein said pharmaceutical composition is administered by intranasal administration to said subject.
- 25 16. The method according to any one of Claims 1-7, wherein said pharmaceutical composition is administered to said subject in an inhaleable form.